

Francis Street Bridge  
Beneath Providence Union Station and  
Station Viaduct  
Providence  
Providence County  
Rhode Island

HAER No. RI-33

HAER  
RI,  
4-PROV,  
185-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
Mid-Atlantic Region, National Park Service  
Department of the Interior  
Philadelphia, Pennsylvania 19106

HISTORIC AMERICAN ENGINEERING RECORD

Francis Street Bridge

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Location: Francis Street beneath Providence Union Station and station viaduct, Providence, Rhode Island.

Date of Construction: 1894

Present Owner: Amtrak

Present Use: Railroad bridge and substructure for rail station

Significance: The bridge is historically significant as part of the station viaduct which contributed to the regional rail transportation network. Unique construction techniques make the structure significant for its engineering.

The Francis Street Bridge, 335-1/2 feet long and 204-1/2 feet wide, is constructed of eleven plate-girder spans resting on built-up steel columns of I section similar to those of the Gaspee and Francis Street bridges. The rows of steel columns supporting the superstructure are spaced to allow both pedestrian and vehicular traffic below the station. Barrel vaults perpendicular to the stringers offer more structural support for the heavy load. The main station building is built over the bridge. All the spans are of deck-girder construction with the exception of two side spans that were built as through girders to allow more headroom for stairways connecting the station platforms to the street below (Engineering News 1897, 59). Stairs from the track platforms above are separated from traffic by picket fencing. The contract for the work was let to the Boston Bridge Works of Boston, Massachusetts.